

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU 99/00501

A. CLASSIFICATION OF SUBJECT MATTER		
Int Cl ⁶ : G06F 017/00		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols) G06F 017/00		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) WPAT, USPTOFT		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A, P	US 5809493 A (Ahamed et al) 15 September 1998 Whole Document	1-15
A	US 5715371 A (Ahamed et al) 3 February 1998 Whole Document	1-15
A	US 5546507 A (Staub) 13 August 1996 Whole Document	1-15
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> See patent family annex		
<p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&" document member of the same patent family</p>		
Date of the actual completion of the international search 6 August 1999		Date of mailing of the international search report 10 AUG 1999
Name and mailing address of the ISA/AU AUSTRALIAN PATENT OFFICE PO BOX 200 WODEN ACT 2606 AUSTRALIA Facsimile No.: (02) 6285 3929		Authorized officer R.H. STOPFORD Telephone No.: (02) 6283 2177

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU 99/00501

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5526516 A (Tsuruta et al) 11 June 1996 Whole Document	1-15
A	US 4930071 A (Tou et al) 29 March 1990 Whole Document	1-15

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/AU 99/00501

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member			
US	5809493				
US	5715371				
US	5546507				
US	5526516	EP	474120	JP	04107635
US	4930071	WO	8810470		

END OF ANNEX

PATENT COOPERATION TREATY
PCT
INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 25 JAN 2000

Applicant's or agent's file reference 85405	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416).
International application No. PCT/AU 99/00501	International filing date (<i>day/month/year</i>) 18 June 1999	Priority Date (<i>day/month/year</i>) 18 June 1998
International Patent Classification (IPC) or national classification and IPC Int. Cl.⁶ G06F 17/00		
Applicant Savant Systems International Pty Ltd		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
- ☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheet(s).

3. This report contains indications relating to the following items:

- | | | |
|------|-------------------------------------|---|
| I | <input checked="" type="checkbox"/> | Basis of the report |
| II | <input type="checkbox"/> | Priority |
| III | <input type="checkbox"/> | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| IV | <input type="checkbox"/> | Lack of unity of invention |
| V | <input checked="" type="checkbox"/> | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| VI | <input checked="" type="checkbox"/> | Certain documents cited |
| VII | <input type="checkbox"/> | Certain defects in the international application |
| VIII | <input type="checkbox"/> | Certain observations on the international application |

Date of submission of the demand 11 January 2000	Date of completion of the report 18 January 2000
Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929	Authorized Officer R.H. STOPFORD Telephone No. (02) 6283 2177

I. Basis of the report**1. With regard to the elements of the international application:***

- ☒ the international application as originally filed.
- ☐ the description, pages , as originally filed,
 pages , filed with the demand,
 pages , filed with the letter of .
- ☐ the claims, pages , as originally filed,
 pages , as amended (together with any statement) under Article 19,
 pages , filed with the demand,
 pages , filed with the letter of .
- ☐ the drawings, pages , as originally filed,
 pages , filed with the demand,
 pages , filed with the letter of .
- ☐ the sequence listing part of the description:
 pages , as originally filed
 pages , filed with the demand
 pages , filed with the letter of .

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, was on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/fig.

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims 1-15	YES
	Claims	NO
Inventive step (IS)	Claims 1-15	YES
	Claims	NO
Industrial applicability (IA)	Claims 1-15	YES
	Claims	NO

2. Citations and explanations (Rule 70.7)

US 5715371 A (Ahamed et al) 3 February 1998

A knowledge processing system and method provides a personal computer-based intelligent network to incorporate personal functions with knowledge domain functions and database management functions. The knowledge processing system includes: a memory for storing knowledge in a plurality of knowledge modules in a knowledge bank, in which the knowledge includes data associated with pre-existing solutions to previous problems; and a processing unit, operating knowledge-based software configured to represent a specific user, for generating a plurality of artificial intelligence based modules, and for executing the plurality of artificial intelligence base modules to process input data, including problem related data, for generating a solution-related module from the data representing the pre-existing solutions, with the solution-related module corresponding to a solution to the current problem. Personalized intelligent networks (PINs) are implemented by a personal computer, and are customized to the personality of the user and to achieve personalized goals.

US 5546507 A (Staub) 13 August 1996

A method and apparatus for automatically generating a knowledge base for use in an expert system. More specifically, the present invention discloses a method and system for automatically generating a knowledge base using a graphical programming environment to create a logical tree from which such a knowledge base may be generated. This enables a user of the present invention to author a knowledge base without knowledge of artificial intelligence specific languages and constructs. This is accomplished by permitting the user to construct a graphical picture that represents the problem solving knowledge about a given subject known as a decision tree, or logical tree. The arrangement of the graphical objects in the logical tree, along with the logical attachments associated with these objects, is used by the system employing the present invention to generate a knowledge base.

US 5526516 A (Tsuruta et al) 11 June 1996

A knowledge data assimilation method and system which enables change, inactivation and deletion of the value and content of the knowledge data stored for problem solution, by creating the assimilation proposal to assimilate the said knowledge based on the knowledge data stored in advance to solve object problems, by evaluating the created assimilation plan according to the evaluation standards stored in advance, by determining the adequate assimilation plan based on the evaluation result, and by changing the knowledge data stored in advance according to the adequate assimilation plan; thereby improving the solution precision and ensuring satisfactory assimilation precision within reasonably short time

VI. Certain documents cited**1. Certain published documents (Rule 70.10)**

Application No. Patent No.	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
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US 5809493

15 September 1998

31 May 1996

14 December 1995

2. Non-written disclosures (Rule 70.9)

Kind of non-written disclosure

Date of non-written disclosure
(day/month/year)Date of written disclosure referring to
non-written disclosure
(day/month/year)

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of : V

US 4930071 A (Tou et al) 29 March 1990

A method and system are provided for mapping between an application relational database of arbitrary structure and an application knowledge base in order to permit a user to draw inference through a knowledge base. Also included are procedures for translating knowledge base queries into database queries, for transforming data retrieved from the database into units (structured objects) in the knowledge base and for updating a relational database based on changes made to the application knowledge base. These procedures are supported by general purpose knowledge bases. The method includes providing mapping knowledge bases for storing the mapping between an arbitrary relational database and the application knowledge base. The mapping between classes in the application knowledge base and the relations on a database is stored explicitly in units in a user mapping knowledge base. These units are called class maps. The mapping between the slots of a class in an application knowledge base and the attributes of the above relations on the database is stored explicitly in a slot of the class map corresponding to the class.

No citation or combination of citations disclose the combination of features defined by the claims, consequently the claims are novel, have an inventive step and are seen as having industrial applicability.

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents
United States Patent and Trademark
Office
Box PCT
Washington, D.C. 20231
ÉTATS-UNIS D'AMÉRIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 25 January 2000 (25.01.00)	
International application No. PCT/AU99/00501	Applicant's or agent's file reference 85405
International filing date (day/month/year) 18 June 1999 (18.06.99)	Priority date (day/month/year) 18 June 1998 (18.06.98)
Applicant GUIGNARD, Paul	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:

11 January 2000 (11.01.00)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was

☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer Olivia RANAIVOJAONA Telephone No.: (41-22) 338.83.38
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TENT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING
OF A CHANGE(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

F.B. RICE & CO.
605 Darling Street
Balmain, NSW 2041
AUSTRALIE

Date of mailing (day/month/year) 19 December 2000 (19.12.00)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference 85405	
International application No. PCT/AU99/00501	International filing date (day/month/year) 18 June 1999 (18.06.99)

1. The following indications appeared on record concerning:

☒ the applicant ☐ the inventor ☐ the agent ☐ the common representative

Name and Address

SAVANT SYSTEMS INTERNATIONAL PTY
LTD
Level 21
201 Miller Street
North Sydney, NSW 2060
Australia

State of Nationality

AU

State of Residence

AU

Telephone No.

Facsimile No.

Teleprinter No.

2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

☐ the person ☐ the name ☐ the address ☐ the nationality ☐ the residence

Name and Address

GUIGNARD, Paul
Level 21, 201 Miller Street
North Sydney
201 Miller Street
North Sydney, NSW 2060
Australia

State of Nationality

AU

State of Residence

AU

Telephone No.

Facsimile No.

Teleprinter No.

3. Further observations, if necessary:

The applicant identified in box 1 is withdrawn from records
the person identified in box 2 remains sole applicant for all designated States

4. A copy of this notification has been sent to:

<input checked="" type="checkbox"/> the receiving Office	<input type="checkbox"/> the designated Offices concerned
<input type="checkbox"/> the International Searching Authority	<input checked="" type="checkbox"/> the elected Offices concerned
<input type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorized officer

Catherine Massetti

Telephone No.: (41-22) 338.83.38